



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,910	02/27/2004	Klaus-Sweerich Schroder	SSM-525US	7519
23122	7590	12/29/2005	EXAMINER	
RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			GREENHUT, CHARLES N	
			ART UNIT	PAPER NUMBER
			3652	
DATE MAILED: 12/29/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/788,910	SCHRODER, KLAUS-SWEERICH
	Examiner	Art Unit
	Charles N. Greenhut	3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) ____ is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/22/05</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: ____ . |

I. Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “feeding device” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

II. Claim Objections

1. Claims 4, 5, 7, 10-12, 14, and 20 are objected to because dependent claims must specifically refer to the claim from which they depend. Examiner assumes that “the preceding claim” refers to only the immediately preceding claim.

III. Claim Rejections - 35 USC § 112

The following is a quotation from the relevant paragraphs of 35 U.S.C. 112:

(2) The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claim 7, 19-21, and 24-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1.1. Claim 7 recites the limitation, “one end of the withdrawing means which forms an upper opening of the withdrawing means through which the spiked shafts convey the bulk goods in to the withdrawing means.” There is insufficient antecedent basis for this limitation in the claim. Examiner suggests “one end of the withdrawing means which forms an upper opening of the withdrawing means through which the spiked shafts convey the bulk goods in to the withdrawing means, said one end is connected to....”

1.1(a) Also note line 7, “said end” should read, -said one end-.

1.2. With respect to claim 15, if “a frame which mounts the spiked shafts” refers to the previously recited frame, then it should be referred to as -the frame...-.

1.3. Claim 19 recites the phrase “and/or” in line 3. This phrase is indefinite because it is unclear whether applicant means “and” or “or.”

1.4. Claims 19 and 21 recites the limitation “said surface” and “the surface.” If this limitation refers to the free upper surface it should read -said free upper surface- otherwise it lacks antecedent basis.

1.5. With respect to claim 19, in the phrase “carrying-off means...formed by spiked shafts or/and at least one rake conveyer engages with the column...” there should be a comma between conveyor and engages since it is the carrying-off means that is apparently doing the engaging.

1.6. Claim 19 recites the limitation, “the column of bulk goods” in line 4. There is insufficient antecedent basis for this limitation in the claim.

1.7. With respect to claim 19, the phrase “from the bulk goods” in line 5 renders the claim language unclear

1.8. Claim 19 contains no transitional phrase. It is unclear what steps the claimed method consists of.

1.8(a) For purposes of examination on the merits, examiner assumes the method for withdrawing interlocked bulk goods from a storage container of claim 19 comprises;

providing a carrying-off means in said storage container, said carrying-off means comprising spiked shafts or a rake conveyor;

engaging said carrying-off means with a free upper surface of a said bulk goods in said storage container;

said carrying-off means conveying said bulk goods along said free upper surface to a withdrawing means;

and said withdrawing means transferring the bulk goods downwards onto a withdrawing conveyor.

1.9. With respect to claim 24-25, it is not clear what "it" refers to in line 2. I.e., in claim 24, the cam, the wall or the container?

IV. Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claim(s) 18-22 and 26 is/are rejected under 35 U.S.C. 102(b) as being anticipated by STROCKER (US 4,721,425 A).

1.1. With respect to claim 18, STROCKER discloses a storage container (1), feeding device (31), withdrawing means protruding through a column of bulk goods (27), and a rake conveyor comprising a traction member and rakes (15).

1.2. With respect to claim 19, STROCKER discloses a carrying-off means comprising a rake conveyor (15), engaging with the upper surface of bulk goods (Fig. 1), conveying the bulk goods to a withdrawing means (21) and transferring the bulk goods downward onto a conveyor (Col. 6 Li. 25-26).

1.3. With respect to claim 20, STROCKER additionally discloses the bulk good fall through the withdrawing means (Col. 6 Li. 16-17).

1.4. With respect to claim 21, STROCKER additionally discloses the withdrawing means protruding and the bulk goods conveyed to the center from a periphery.

1.5. With respect to claim 22, STROCKER additionally discloses a fall pipe (22).

1.6. With respect to claim 26, STROCKER additionally discloses the withdrawing means is a vertically conveying means (Fig. 1).

V. Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim(s) 1-14, 16 and 23-25 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over STROCKER (US 4,721,425 A) in view of STEFANIK (US 5,176,295 A).

1.1. With respect to claim 1, STROCKER teaches a storage container (1), feeding device (31), a clearing members (45) and withdrawing the bulk goods from above. STROCKER fails to teach spiked shafts mating with each other. STEFANIK teaches spiked shafts mating with each other (Fig. 7). It would have been obvious to one of ordinary skill in the art to modify the clearing members of STROCKER with the mating spiked shafts of STEFANIK in order to promote separation of packed bulk goods.

1.2. With respect to claim 2, STROCKER additionally teaches a withdrawing means protruding in terms of height (27), and a conveying direction from a periphery of the column of bulk goods toward the withdrawing means (Fig. 7).

1.3. With respect to claim 3, STROCKER additionally teaches a fall pipe (22).

1.4. With respect to claim 4, STROCKER additionally teaches the fall pipe can be changed in length (Col. 6 Li. 16-17).

- 1.5. With respect to claim 5, STROCKER additionally teaches the fall pipe comprising segments which can be axial slid into each other and slave each other (Col. 6 Li. 16-17).
- 1.6. With respect to claim 6, STROCKER additionally teaches the clearing members can be lowered and the withdrawing means changed in length.
- 1.7. With respect to claim 7, STROCKER additionally teaches a frame, the upper end of the withdrawing means connected thereto (Fig. 2).
- 1.8. With respect to claim 8, STROCKER additionally teaches a withdrawing conveyor beneath the withdrawing means (Col. 6 Li. 25-26).
- 1.9. With respect to claim 9, STROCKER additionally teaches the clearing members can rotate and the frame can be lowered and raised.
- 1.10. With respect to claim 10, STROCKER additionally teaches a lowering and raising frame (7) and a pivoting frame (40).
- 1.11. With respect to claim 11, STROCKER additionally teaches a support (12) on the container (1) preventing pivoting of the lowering and rising frame (7).
- 1.12. With respect to claim 12, STROCKER additionally teaches a guiding cam and engagement member (12)/(9).
- 1.13. With respect to claim 13, STROCKER additionally teaches a lowering and rising drive (8) inherently having a motor, since the lowering and rising frame would be too heavy to be operated by a hand winch.
- 1.14. With respect to claim 14, STROCKER additionally discloses a winch drive (8).

1.15. With respect to claim 16, STROCKER additionally teaches the rate at which clearing members are lowered is set in accordance with the plunging depth. (moment difference M1-M2 variation effectively translating into plunging depth variation, *See Col 9 Li 2 et seq.*)

1.16. With respect to claim 23, STROCKER additionally teaches the pipe segments slave each other when the pipe is extended.

1.17. With respect to claim 24, STROCKER additionally teaches the guiding cam (12) connected to a sidewall preventing rotation (Fig. 6).

1.18. With respect to claim 25, STROCKER additionally teaches the engaging element (9) connected to the frame (7) preventing rotation.

2. Claim(s) 15 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over STROCKER in view of STEFANIK and further in view of DE BOWER (US 3,596,783 A).

2.1. With respect to claim 15, STROCKER additionally teaches a regulator or controller (Col 9 Li 39-42). DE BOWER teaches a distance sensor (52). It would have been obvious to one of ordinary skill in the art to modify STROCKER with the distance sensor of DE BOWER in order to determine if lowering or raising of the frame is required to engage the top surface of the bulk goods.

3. Claim(s) 17 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over STROCKER in view of STEFANIK and further in view of CRAINE (US 1,968,071 A)

3.1. With respect to claim 17, STROCKER teaches a storage container (1), feeding device (31), clearing members (45) arranged to withdraw the bulk goods from above. STROCKER fails to teach spiked shafts mating with each other and at least two

storage devices having a common feeding device. STEFANIK teaches spiked shafts mating with each other (Fig. 7). It would have been obvious to one of ordinary skill in the art to modify the clearing members of STROCKER with the mating spiked shafts of STEFANIK in order to promote separation of packed bulk goods. CRAINE teaches at least two storage devices (15)/(16)/(17) and a common feeding device (23). It would have been obvious to one of ordinary skill in the art to modify STROCKER with the additional storage device of CRAINE in order to permit shuffling of the bulk goods.

VI. Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Greenhut whose telephone number is (571) 272-1517. The examiner can normally be reached on 7:30am - 4:00pm EST.
3. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.
4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access

to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197
(toll-free).

CG



EILEEN D. LILLIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600